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1 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1 In re: Application of
Dale A. Christensen et al.

5 Serial No.: 10/786,664

Filed: February 25, 2004

Title: IRRIGATION DRIVE UNIT

Group No.: 3752

BEFORE THE BOARD
OF PATENT APPEALS
AND INTERFERENCES

Appeal No. _____

10

APPELLANTS' AMENDED BRIEF

Commissioner for Patents
Alexandria, VA 22313

15 Dear Sir:

REAL PARTY IN INTEREST

Appellants have assigned their rights to Valmont Industries, Inc.; therefore, the real party in interest is Valmont Industries, Inc.

RELATED APPEALS AND INTERFERENCES

20 There are no appeals or interferences related to this case.

STATUS OF THE CLAIMS

Claims 1-5 have received a final rejection. Claims 6 and 7 have been previously cancelled. This is an appeal from the final rejection of claims 1-5.

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STATUS OF AMENDMENTS

Appellants filed an Amendment After Final Rejection, but the same was not entered by the Examiner.

SUMMARY OF CLAIMED SUBJECT MATTER

The subject invention, as set forth in independent claim 1, relates to an irrigation drive unit which has increased traction and flotation due to the fact that each of the drive units thereof has an extra set of driven wheels thereon. (Page 1, lines 10-14).

The self-propelled irrigation system 10, as set forth in independent claim 1, comprises an elongated pipeline supported upon a plurality of spaced-apart drive units 16. (Page 4, lines 2-5). As stated in independent claim 1, at least one of the drive units includes a generally transversely extending base beam 28 having first and second ends with first and second in-line drive assemblies being pivotally connected thereto adjacent the first and second ends thereof, respectively. The first drive assembly 38 includes an elongated support member 50, pivotally connected, about a generally horizontal axis which is generally transverse to the longitudinal axis of the base beam 28, to the base beam 28 adjacent the associated end thereof. The second drive assembly includes an elongated support member 52 which is pivotally connected, about a generally horizontal axis which is generally transverse to the longitudinal axis of the base beam 28, to the base beam 28 adjacent the associated end thereof. (Page 4, lines 19-25 and Fig. 5). Drive wheels 58 and 60 are secured

1 to opposite ends of the support member 50 while drive wheels 66 and 68 are secured
to the opposite ends of the support member 52. (Page 5, lines 1-10 and Fig. 5).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

5 In the final rejection, the Examiner rejected claims 1-5 under 35 U.S.C. § 112,
second paragraph, as being indefinite for failing to particularly point out and distinctly
claim the subject matter which Appellants regard as the invention.

Claims 1, 2, 4 and 5 were rejected as being anticipated by Chapman
(6,131,833) under 35 U.S.C. § 102(b).

10 ARGUMENT

(A) Whether claims 1-5 satisfy 35 U.S.C. § 112, second paragraph.

15 In the final rejection, the Examiner stated that claims 1-5 were rejected under
35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point
out and distinctly claim the subject matter which Appellants regard as the invention.
The Examiner stated that claim 1 recites "a plurality of spaced-apart drive units" in
lines 2-3 and that the claim further defines "at least one of said drive units including a
generally transversely extending base beam having first and second ends" in lines 4-
5. The Examiner stated that if there is only one drive unit that includes a generally
transversely extending base beam having first and second ends, there is no longer a
plurality of drive units. Thus, the Examiner concluded that the claim is contradictory.

20 It is quite clear that the Examiner does not understand the significance of
claim 1. Claim 1 describes a self-propelled irrigation system including an elongated
pipeline supported upon a plurality of spaced-apart drive units. Claim 1 further states

1 that at least one of the drive units includes a generally transversely extending base
beam having first and second ends. As stated in the Summary of the Invention of the
application, at least one of the drive units, and preferably all of the drive units,
includes a generally transversely extending base beam having first and second ends.
5 Claim 1 goes on to state that a first in-line drive assembly is pivotally connected to
the said base beam adjacent the first end thereof and that a second in-line drive
assembly is pivotally connected to the base beam adjacent the second end thereof.
The reason that claim 1 stated that at least one of the drive units has the first and
10 second in-line drive assemblies secured thereto is that claim 1 would have been
easily avoided by a competitor if the claim required that all of the drive units on the
system had the first and second in-line drive assemblies pivotally secured thereto.
Thus, the claim is not contradictory and specifically describes that at least one of the
15 spaced-apart drive units has the first and second in-line drive assemblies pivotally
secured to the opposite ends thereof.

20 The Examiner also stated that according to the specification, page 2, lines 7-
24 and page 4, lines 5-11, the first in-line drive assembly and the second in-line drive
assembly appear to be subassemblies of the spaced-apart drive units. The Examiner
concluded that the recitation of the "first in-line drive assembly" and the "second in-
line drive assembly" in claim 1, lines 6 and 8, respectively, appear to be double
25 inclusions of the drive units recited in claim 3. Apparently the Examiner has failed to
distinguish between the plurality of spaced-apart drive units 24 and the drive
assemblies 34 and 36 pivotally mounted on opposite ends of the base beam in

1 question. The first in-line drive assembly and the second in-line drive assembly are
not a double inclusion of the drive units recited in claim 3.

Accordingly, the Examiner's 35 U.S.C. § 112 rejection should be reversed.

5 (B) Whether claims 1, 2, 4 and 5 are anticipated by Chapman (6,131,833)
under 35 U.S.C. § 102(b).

In the final rejection, the Examiner stated that Chapman discloses a self-propelled irrigation system including a pipeline 14 supported upon a plurality of spaced-apart drive units 22 and that the drive units 22 include a generally transversely extending base beam 24. Appellants agree that Chapman does 10 disclose a self-propelled irrigation system including a pipeline 14 supported upon a plurality of spaced-apart drive units 22 and that the drive units 22 each includes a tubular frame which is referred to by the reference numeral 24. The Examiner further stated that Chapman discloses first and second in-line drive assemblies including: 15 an elongated support member 60; a first driven wheel 48; and a second driven wheel 48. It is clear that the Examiner does not recognize the distinction between a driven wheel and an idler wheel. Col. 3 of the Chapman reference, at lines 8-15, specifically describes that the wheel assemblies 48 are idler wheel assemblies. Thus, wheels 48 20 are not driven wheels but are simply idler wheels.

It is quite clear that Chapman '833 cannot anticipate claim 1. Chapman does not disclose a first in-line drive assembly of the base beam since the wheels 48 of Chapman cannot be construed as a drive assembly since the wheels 48 are idler wheels. Further, Chapman cannot be regarded as teaching a second in-line drive 25

1 assembly pivotally connected to the base beam adjacent the second end thereof
since the wheels 48 at the other end of the beam are also idler wheels are not driven
wheels and therefore do not form a part of a drive assembly.

5 Further, claim 1 specifically describes that each of the first and second drive
assemblies includes an elongated support member with first and second driven
wheels being rotatably mounted on the elongated support adjacent the first and
second thereof, respectively. Accordingly, claim 1 is not anticipated under 35 U.S.C.
§ 102 on the basis of Chapman.

10 Claim 2 depends from claim 1 and further describes that the driven wheels are
positioned in-line laterally of the base beam and laterally of the elongated support
member. As seen in Fig. 8 of Chapman, the wheels 48 are not positioned laterally of
the base beam. Accordingly, Chapman cannot anticipate claim 2.

15 Claim 4 depends from claim 1 and describes that the pivotal connection
between the elongated support member and the base beam is located beneath the
base beam. Although Chapman could be construed as describing or teaching that
the pivotal connection between the support member and the base beam is located
beneath the base beam, claim 4 necessarily includes the limitations of claim 1 which
20 are clearly not taught by Chapman. Accordingly, claim 4 cannot be anticipated by
Chapman.

25 Claim 5 depends from claim 1 and further describes that the self-propelled
irrigation system comprises a center pivot irrigation system. While Chapman does
teach a self-propelled irrigation system, claim 5 includes the limitations of claim 1

1 which are clearly not found in Chapman. Accordingly, claim 5 is not anticipated by
Chapman. Anticipation requires that each and every element of the claimed
invention be disclosed in a single prior art reference or embodied in a single prior art
reference. In re Paulsen, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994). For
5 anticipation, there must be no difference between the claimed invention and the
reference disclosure as viewed by a person of ordinary skill in the field of the
invention. Scripps Clinic & Res. Found. v. Genentech, Inc., 927 F.2d 1565, 18
USPQ2d 1001 (Fed. Cir. 1991). The elements must either be inherent or disclosed
10 expressly and must be arranged as in the claim. Richardson v. Suzuki Motor Co.,
868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

15 It is clear that Chapman does not anticipate claims 1, 2, 4 or 5 under 35
U.S.C. § 102. The wheels 48 of Chapman are not driven wheels but are merely idler
wheels. There is a vast difference between an idler wheel and a driven wheel.
Accordingly, claims 1, 2, 4 and 5 are not anticipated by Chapman under 35 U.S.C. §
102.

20 The foregoing has clearly shown that each of claims 1, 2, 4 and 5 is not
anticipated by Chapman. Further, the foregoing has clearly shown that claims 1-5
satisfy the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, the
Examiner's final rejection should be reversed in all respects.

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Respectfully submitted,



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CERTIFICATE OF MAILING

10 I hereby certify that the original of APPELLANTS' AMENDED APPEAL BRIEF
for DALE A. CHRISTENSEN, ET AL., Serial No. 10/786,664, was mailed by first
class mail, postage prepaid, to the Mail Stop Appeal Briefs-Patent, Commissioner for
Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 8 day of
September, 2005.

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DENNIS L. THOMTE

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CLAIMS APPENDIX

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1. In combination:

5 a self-propelled irrigation system including an elongated pipeline supported upon a plurality of spaced-apart drive units;

10 at least one of said drive units including a generally transversely extending base beam having first and second ends;

15 a first in-line drive assembly pivotally connected to said base beam adjacent said first end thereof;

20 a second in-line drive assembly pivotally connected to said base beam adjacent said second end thereof;

each of said first and second drive assemblies including:

- (a) an elongated support member, having first and second ends, pivotally connected, about a generally horizontal axis which is generally transverse to the longitudinal axis of said base beam, to said base beam adjacent the associated end thereof;
- (b) a first driven wheel rotatably mounted on said first elongated support member adjacent said first end thereof;
- (c) and a second driven wheel rotatably mounted on said first elongated support member adjacent said second end thereof.

2. The combination of claim 1 wherein said driven wheels are positioned in-line laterally of said base beam and laterally of said elongated support member.

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1 3. The combination of claim 1 wherein each of said first and second drive
assemblies includes a drive motor and two gearboxes operatively connected to said
driven wheels.

5 4. The combination of claim 1 wherein the pivotal connection between
said elongated support member and said base beam is located beneath said base
beam.

10 5. The combination of claim 1 wherein said self-propelled irrigation system
comprises a center pivot irrigation system.

15 6. (Cancelled).

20 7. (Cancelled).

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